

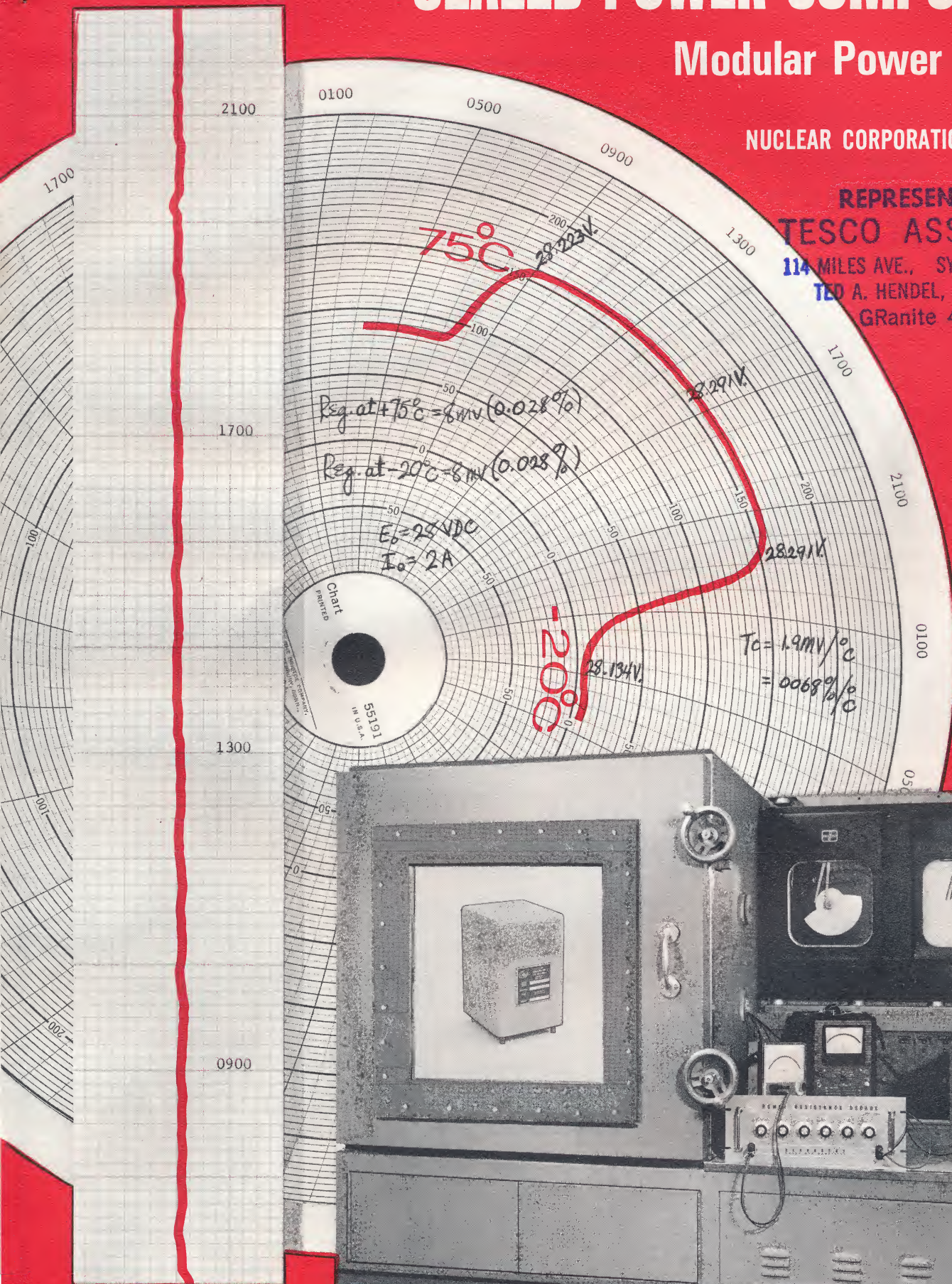
Modular Power Supplies

NUCLEAR CORPORATION OF AMERICA

REPRESENTED BY
TESCO ASSOCIATES

114 MILES AVE., SYRACUSE 10, N. Y.

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GRanite 4-3291



28.1V 28.0V 27.9V



2 RICHWOOD PLACE, DENVILLE, NEW JERSEY 07834 (201) OAKWOOD 7-4200



SEALED POWER COMPONENTS

HIGH RELIABILITY NPS SERIES

MTBF: OVER 150,000 HOURS

RATED TO 100°C BASE TEMPERATURE

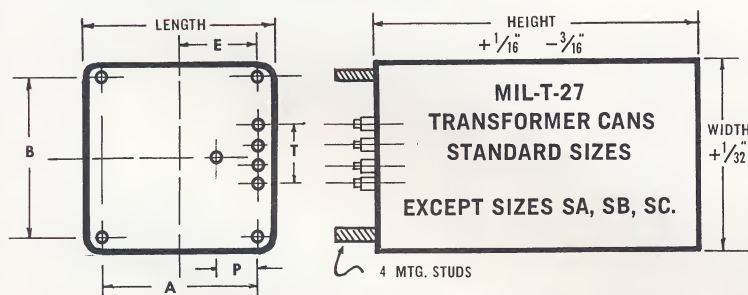
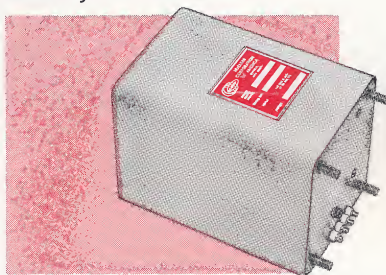
NUCOR power components have been designed for integration into electronic systems requiring a high order of reliability, voltage stability, and superior regulation.

All units housed in military transformer cans are sealed to provide absolute protection from humidity, immersion, the effects of salt spray, dust and wind, and thermal transients. Uniquely designed, these power supplies are capable of withstanding the severe military environment (shock, vibration and acceleration) which make the use of other types of modules unreliable and therefore unusable.

Highest MTBF (Mean Time Between Failure rating) is assured by utilizing fewer components operated under the lowest stress factors. In addition All NUCOR modules can be utilized at full ratings to a maximum base temperature of 100°C.

NUCOR power components are easy to specify — for use in military systems, these sealed modules do not require internal parts documentation or other elaborate paper-work.

Installation is extremely simple and fool-proof. Only the input and output terminals require connections — no other adjustments are necessary.



DESIGN FEATURES

- Storage range: —65° to 100°C
- Operating range: —55°C to +100°C
- Overload and short-circuit proof — instant automatic recovery without fuses or reset
- Certified to meet or exceed the military environment of:

MIL-E-16400
MIL-E-5400
MIL-T-21200
MIL-E-5272

for . . . Temperature . . . Vibration . . . Acceleration . . .
Humidity . . . Shock . . . Altitude . . . Salt spray . . .
Immersion

- Sealed enclosures
- Adjustable output voltage available
- Ultra-stable: fast warm-up
- Isolated outputs: Positive or negative polarity
- Silicon semi-conductors used exclusively
- Military specification grey finish
- Transformers: MIL-T-27B
- Electrical parts selected from MIL-STD242 where practical
- Certified MTBF: over 150,000 hours at elevated temperatures (calculation available on request); some models approach 200,000 hours MTBF

SPECIFICATIONS

INPUT VOLTAGE RANGE: 115 VAC nominal $\pm 10\%$
140 VAC without damage

POWER FREQUENCY RANGE: 47-440 cps

REGULATION: Full line variation $\pm 0.01\%$ or 2 mv.
Full load variation $\pm 0.03\%$ or 4 mv.

RIPPLE/NOISE: Less than 0.002% or 1 mv RMS
typical 250 microvolts RMS

VOLTAGE STABILITY: better than 0.01% per degree Centigrade over entire temperature range. Maximum deviation of output voltage is better than $\pm 0.75\%$ over entire temperature range.

TRANSIENT RECOVERY: better than 25 microseconds.

CAST SIZES AND MOUNTING

	Length	Width	Height	A	B	MTG. STUDS		T	P
						Size	Length		
GA	2 $\frac{3}{4}$	2 $\frac{3}{8}$	3 $\frac{13}{16}$	2 $\frac{1}{8}$	1 $\frac{3}{4}$	8-32	$\frac{1}{2}$	1 $\frac{5}{16}$	1 $\frac{9}{32}$
HA	3 $\frac{1}{16}$	2 $\frac{5}{8}$	4 $\frac{1}{4}$	2 $\frac{19}{64}$	1 $\frac{5}{8}$	8-32	$\frac{1}{2}$	1 $\frac{5}{16}$	1 $\frac{9}{32}$
JA	3 $\frac{3}{16}$	3 $\frac{1}{16}$	4 $\frac{7}{8}$	2 $\frac{5}{8}$	2 $\frac{1}{8}$	8-32	$\frac{1}{2}$	1 $\frac{5}{16}$	1 $\frac{9}{32}$
KA	3 $\frac{15}{16}$	3 $\frac{3}{8}$	5 $\frac{1}{4}$	3	2 $\frac{7}{16}$	10-32	$\frac{1}{2}$	1 $\frac{5}{16}$	1 $\frac{9}{32}$
LA	4 $\frac{5}{16}$	3 $\frac{11}{16}$	5 $\frac{5}{16}$	3 $\frac{1}{16}$	2 $\frac{11}{16}$	10-32	$\frac{1}{2}$	1 $\frac{5}{16}$	1 $\frac{9}{32}$
MA	4 $\frac{11}{16}$	4	6	3 $\frac{11}{16}$	3	$\frac{1}{4}$ -20	$\frac{3}{4}$	1 $\frac{5}{16}$	1 $\frac{9}{32}$
NA	5 $\frac{1}{16}$	4 $\frac{5}{16}$	6 $\frac{13}{16}$	4 $\frac{1}{16}$	3 $\frac{5}{16}$	$\frac{1}{4}$ -20	$\frac{3}{4}$	1 $\frac{5}{16}$	1 $\frac{9}{32}$
*SA	7 $\frac{1}{16}$	5 $\frac{1}{16}$	5	5 $\frac{1}{4}$	3 $\frac{3}{8}$	$\frac{1}{4}$ -20	$\frac{3}{4}$	1 $\frac{5}{16}$	$\frac{3}{4}$
*SB	8 $\frac{1}{16}$	7 $\frac{1}{16}$	6	6 $\frac{1}{4}$	5 $\frac{1}{4}$	$\frac{1}{4}$ -20	$\frac{3}{4}$	1 $\frac{5}{16}$	$\frac{3}{4}$
*SC	9 $\frac{1}{16}$	7 $\frac{1}{16}$	7	7 $\frac{1}{4}$	5 $\frac{1}{4}$	$\frac{1}{4}$ -20	$\frac{3}{4}$	1 $\frac{5}{16}$	$\frac{3}{4}$

*Serviceable unit with plug-in printed circuit component card.



MODELS and PRICES

NOMINAL OUTPUT

DC VOLTS	MAX. CURRENT AMPS	CASE SIZE	PRICE	MODEL
3	.200	HA	95.00	NPS3P2
3	.400	KA	105.00	NPS3P4
3	1.5	LA	135.00	NPS32
3	3	MA	185.00	NPS33
3	6	SA	245.00	NPS36
5	.200	HA	95.00	NPS5P2
5	.400	KA	105.00	NPS5P4
5	1.5	LA	135.00	NPS52
5	3	MA	199.00	NPS53
5	6	SA	265.00	NPS56
6	.200	JA	95.00	NPS6P2
6	.400	KA	105.00	NPS6P4
6	1.5	LA	135.00	NPS62
6	3	MA	210.00	NPS63
6	6	SA	265.00	NPS66
8	.200	JA	95.00	NPS8P2
8	.400	KA	115.00	NPS8P4
8	1.5	LA	155.00	NPS82
8	3	NA	215.00	NPS83
8	6	SA	270.00	NPS86
10	.200	JA	95.00	NPS10P2
10	.400	KA	115.00	NPS10P4
10	1	LA	135.00	NPS101
10	2	MA	155.00	NPS102
10	4	SA	215.00	NPS104
12	.200	JA	95.00	NPS12P2
12	.400	KA	115.00	NPS12P4
12	1	LA	135.00	NPS121
12	2	MA	155.00	NPS122
12	4	SB	215.00	NPS124

NOMINAL OUTPUT

DC VOLTS	MAX. CURRENT AMPS	CASE SIZE	PRICE	MODEL
15	.200	JA	95.00	NPS15P2
15	.400	KA	115.00	NPS15P4
15	1	LA	135.00	NPS151
15	2	MA	155.00	NPS152
15	4	SB	215.00	NPS154
18	.200	JA	95.00	NPS18P2
18	.400	KA	125.00	NPS18P4
18	1	MA	155.00	NPS181
18	2	SA	175.00	NPS182
18	4	SB	215.00	NPS184
20	.200	JA	95.00	NPS20P2
20	.400	KA	125.00	NPS20P4
20	1	NA	155.00	NPS201
20	2	SA	175.00	NPS202
20	4	SC	215.00	NPS204
24	.200	JA	95.00	NPS24P2
24	.400	KA	125.00	NPS24P4
24	1	NA	155.00	NPS241
24	2	SA	175.00	NPS242
24	4	SC	255.00	NPS244
28	.200	JA	100.00	NPS28P2
28	.400	KA	135.00	NPS28P4
28	1	NA	155.00	NPS281
28	2	SA	175.00	NPS282
28	4	SC	265.00	NPS284

SPECIAL MILITARY REQUIREMENTS

(All models)

POWER COMPONENTS can be provided to meet additional or modified Military specifications. Write for quotations covering your requirements.

PRICES and DISCOUNTS

QUANTITY	DISCOUNT
1-4	NET
5-9	Less 5%
10-19	Less 10%
20-24	Less 20%

Nuclear Corporation of America will be pleased to quote on any quantity purchases. Write and furnish specifications for a prompt reply. No obligation.

Optional Features

- Remote sensing
- Internal and external voltage adjustment
- 400 cps operation — smaller sizes and reduced weights
- Higher stability to 0.0005% per degree Centigrade
- 3 phase input — smaller sizes at 400 cps input
- Mounting configurations to meet your requirements
- Output terminals to your specification — solder hook header, MS connector, or plug-ins
- Electronic over voltage crowbar
- Serviceable enclosures
- Special shapes or finishes
- All tantalum capacitors

OUR WARRANTY

NUCOR warrants all power supplies manufactured by us, to be free from original defects in material or workmanship. Our liability, under this warranty, is limited to servicing, or adjusting any instrument returned prepaid and with prior approval to the factory for that purpose, and to replace any defective parts thereof except tubes, NUCOR semiconductors and fuses. This warranty is made to the original purchaser and applies to all standard catalogue listed equipment for one year after delivery to the original purchaser. The provisions of this warranty shall not apply to any power supply which has been subject to misuse or which has been repaired or altered by the purchaser in any way so as, in the judgment of NUCOR, to adversely affect its performance or reliability, nor to normal deterioration of appearance due to wear or exposure.

Contact these conveniently located area representatives



E. BRADY
SEATTLE
● **WASHINGTON**
& ALASKA
LA 3-4063

● **DATA ASSOCIATES**
MOUNTAIN VIEW
CALIFORNIA
961-8760

● **CROWN ELECTRONICS**
VAN NUYS, CALIFORNIA
TR 3-1266

ELCOM MARKETING
DALLAS, TEXAS
352-5006

ARNOLD RATNER ASSOCIATES
JENKINTOWN, PA. ●
TU 7-5250

● **HANSEN ASSOCIATES**
RIDGEWOOD, NEW JERSEY
652-7055

BRENNAN ASSOCIATES
CLEARWATER, FLORIDA 446-5006
ORLANDO, FLORIDA 425-8161
HUNTSVILLE, ALABAMA 536-7425 ●

FOR FURTHER INFORMATION:



nuclear corporation of america

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